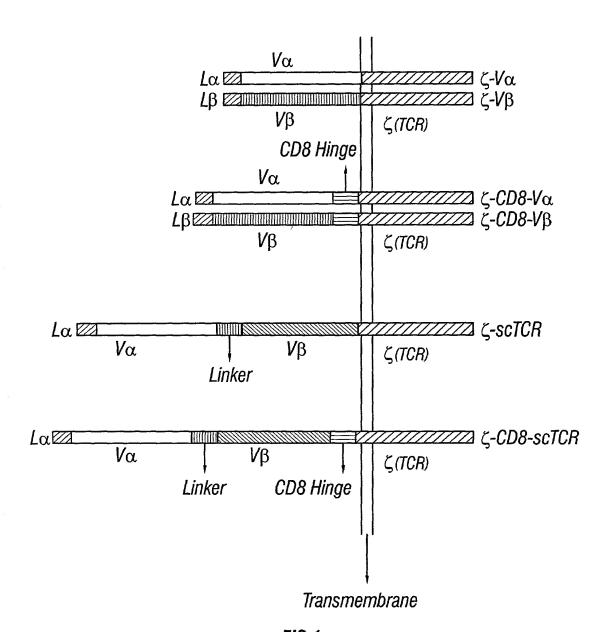
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FIG.1

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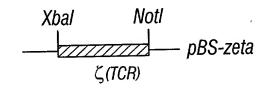
Title: T CELL RECEPTORS FROM HLA TRANSGENIC MICI Inventors: Linda SHERMAN and Joseph LUSTGARTEN

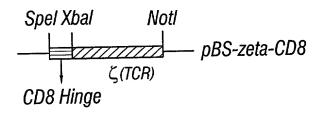
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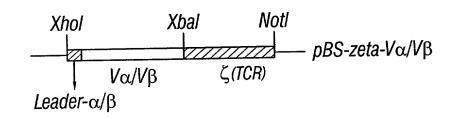
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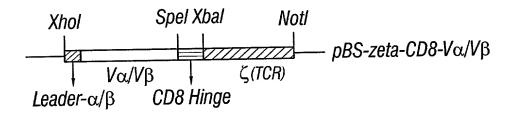
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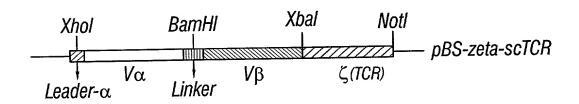












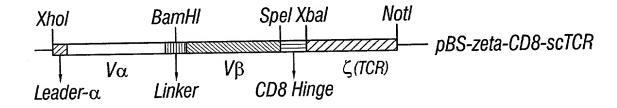


FIG. 2

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CTC	GAG	9 ATG	CAG	AGG	18 AAC	CTG	GGA	27 GCT	GTG	CTG	36 GGG	ATT	CTG	45 TGG	GTG	CAG	54 ATT	[SEQ	ID	NO:	1]
	<u> </u>	 M	Q	R	N	L	G	A	V	L	G	I	L	W	V	Q	I	[SEQ	ID	NO:	2]
TGC	TGG	63 CTG		GAA	72 CAG	CAA	GTG	81 CAG	CAG	AGT	90 CCC	GCA	TCC	99 TTG	GTT	CTG	108 CAG				
С	W	L	K	E	Q	Q	V	Q	Q	S	P	A	S	L	V	L	Q				
GAG	GGG	117 GAG	AAC	GCA	126 GAG	CTC	CAG	135 TGT	AGC	TTT	144 TCC	ATC	TTT	153 ACA	AAC	CAG	162 GTG				
 E	G	E	N	A	E	L	Q	C	S	F	S	Ι	F	T	N	Q	V				
CAG	TGG	171 TTT	TAC	CAA	180 CGT	CCT	GGG	189 GGA	AGA	CTC	198 GTC	AGC	CTG	207 TTG	TAC	AAT	216 CCT				
Q	W	F	Y	Q	R	P	G	G	R	L	V	S	L	L	Y	N	P				
TCT	GGG	225 ACA	AAG	CAG	234 AGT	GGG	AGA	243 CTG	ACA	TCC	252 ACA	ACA	GTC	261 ATT	AAA	GAA	270 CGT				
S	G	T	K	Q	S	G	R	L	T	S	T	T	V	I	K	E	R				
CGC	: AGC	279 : TCI			288 ATT	TCC	TCC	297 TCC	CAG	ATC	306 ACA	GAC	: TCA	315 GGC	ACT	' TAT	324 CTC				
R	S	S	L	H	Ι	S	S	S	Q	I	T	D	S	G	T	Y	L				

FIG. 3A

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																•	
TGT	GCC	333 TCA	AAT	TCT	342 GGA	GGA		351 AAT			360 CTA			369 GGG			378 ACT
	- 	S	N	S	G	G	S	N	A	K	L	T	F	G	K	G	T
AAA	CTC	387 TCT	GTT	AAA	396 TCA	GGT	GGC	405 GGA	GGG	TCT		GGG		100	TCC		432 GGT
K		S	V	K	S	G	G	G	G	S	G	G	G	G	S	G	G
GGA	GGC	441 TCA	GAG	GCT	450 GCA	GTC	ACC	459 CAA	AGC	CCA	468 AGA	AAC	AAG	477 GTG	GCA	GTA	486 ACA
G	G	 S	E	 А	 А	V	T	Q	S	P	R	N	K	γ	A	V	T
GGA	GGA	495 AAG	GTG	ACA	504 TTG	AGC	TGT	513 AAT	CAG	ACT	522 AAT	AAC	CAC	531 AAC	AAC	ATG	540 TAC
G	G	 K	Λ	T	L	S	С	N	Q	T	N	N	H	N	N	M	Y
TGG	TAT	549 CGG	CAG	GAC	558 ACG	GGG	CAT	567 GGG	CTG	AGC	576 CTG	ATC	CAT	585 TAT	TCA	TAT	594 GGT
W	Y	 R	Q	D	T	G	Н	G	L	R	L	Ι	H	Y	S	Y	G
GCT	GG(603 AGC	: ACT	GAG	612 AAA	. GGA	A GAT	621 ATC	CCI	GA!	630 GG <i>I</i>) A TAC	: AAG	639 GCC	TCC	AGA	648 CCA
 A	G	S	 T	E	K	G	D	I	P	D	G	Y	K	A	S	R	P

FIG. 3B

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AGC	CAA		AAC					675 CTG						693 TCT			702 TCA
S	Q	E	N	F	S	L	Q	L	E	L	A	T	P	S	Ι	T	S
GTG	TAC	711 TTC	TGT	GCC	720 AGC		GAG	729 ACA				GAA		747 TTA	TTT	TTC	756 GGT
Λ	Y	F	C	A	S	G	E	T	G	T	N	E	R	L	F	F	G
CAT	GGA	765 ACC		CTG				783 ACT								AGC	810 CAC
 Н	 G	T	 K	 L	S	V	L	 T	S	N	S	I	M	Y	F	S	Н
ጥጥር	am a	819						837									864
110	GTG	CCG	GIU	TTC	CTG	CCA	GCG	AAG	CCC	ACC	AUG	AUG	CCA	GCG	CCG	CGA	CCA
 F	GTG V	 P	 V	TTC F	CTG L	CCA P				ACC 	ACG T	ACG T	 P	GCG A	CCG P	CGA R	CCA P
 F	Ψ	P 873	 V	 F	L 882	 P	Α		P	 T	T 900	 T	 P	A 909	 P	 R	P 918
 F	Ψ	P 873	 V	 F	L 882	 P	Α	K 891	P	 T	T 900	 T	 P	A 909	 P	 R	P 918
F CCA P	V ACA	P 873 CCG P 927	V GCG A	F CCC P	B82 ACC T 936	P ATC I	A GCG A	891 TCG	P CAG	CCC P	900 CTG L 954	TCC	P CTG L	A 909 CGC R 963	P CCA	R TCT	P 918 AGT S 972

FIG. 3C

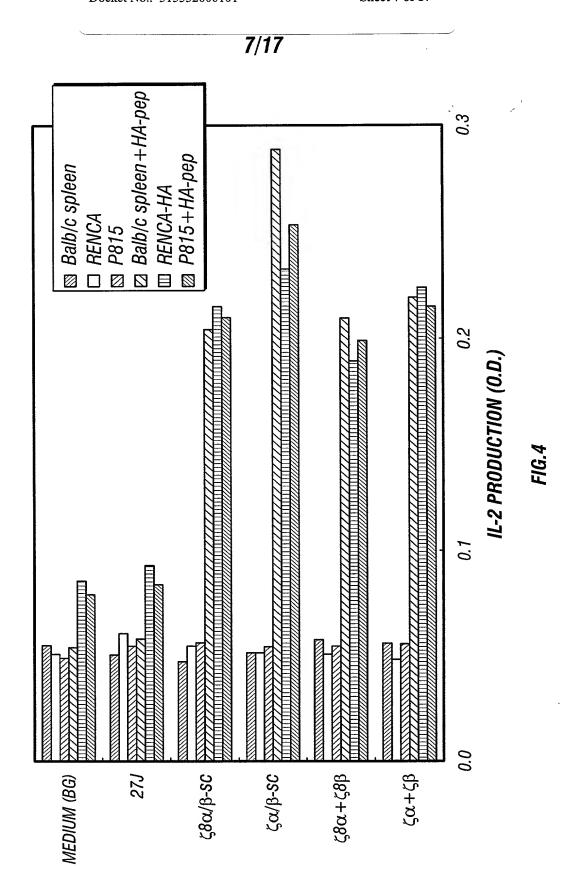
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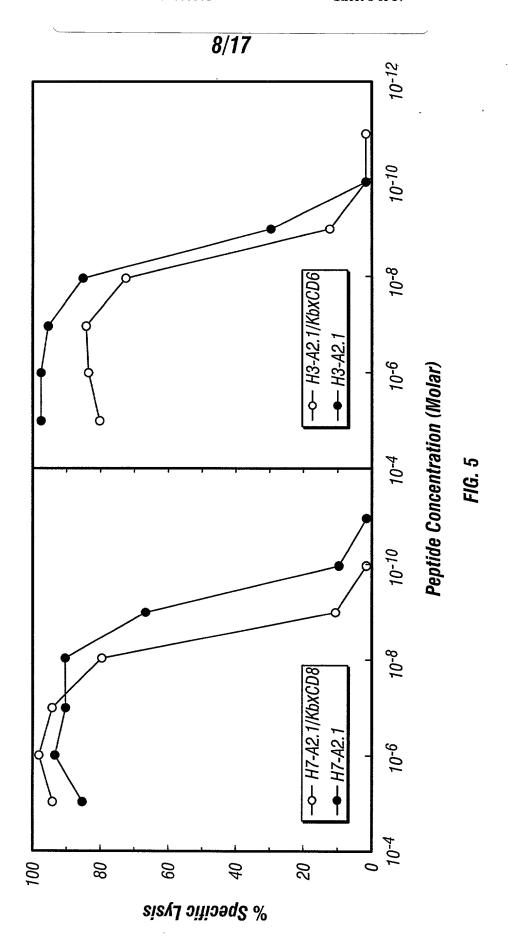
																•	
GTC	ATT	981 CTC	ACT	GCC				999 AGA							GCA		026 GCC ·
V	I	L	 T	 A	L	 F	L	R	Λ	 K	F	S	R	S	A	D	A
CCC								L053 CAG									.080 CGA
P	A	Y	Q	Q	G	Q	N	Q	L	Y	N	E	L	N	L	G	R
AGA	-	LO89 GAG	TAC					1107 AAG							GAG		134 GGG
R	E	E	Y	D	V	L	D	K	R	R	G	R	D	P	E	M	G
GGA		1143 CCG		AGG	1152 AAG	AAC	CCT	1161 CAG	GAA	GGC	1170 CTG	TAC			CTG		1188 AAA
G	 K	P	 R	R	 K	N	P	Q	 E	G	ľ	Y	N	E	L	Q	K
GAT		1197 ATG						1215 GAG									1242 AGG
D	K	М	A	E	A	Y	S	E	I	G	M	K	G	E	R	R	R
GGC		1251 GGG						1269 CAG							AAG		1296 ACC
G	K	G	Н	D	G	L	Y	Q	G	L	S	T	A	T	K	D	T
TAC								1323 CTG							GCC		1350 GCG
 Ү	 D	Α	L	Н	M	Q	Α		P	P	R	*	_ _ _A	A	A	_	A

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Alpha Groups

Vα1 Vα2 Vα3 Vα4.1,2,3	TGA CTG TCC	GAC CAG CGG	AAA CTG AGA	GTC CTC AGG	CCC CTC TCC	AAT AAG ACA	CTC TAC GTT	TGA TAT CCT	CAG TC CTT		[SEQ [SEQ [SEQ	ID ID ID	NO: NO: NO:	4] 5] 6]
2. Vα5														-
Vα6 Vα7	GGT GCG										[SEQ [SEQ			•
Vα8										GCA	[SEQ			•
V α 9	GAG	CTG	CGA	CGT	TCC	TTA	GTG	ACT	GTG		[SEQ	ID	NO:	12]
3.														
. Vα10	CCT	CGT	CAG	CCT	GTT	GTC	CAA	TCC	TTC	TGG	[SEQ	ID	NO:	13]
Vα11	CAG										[SEQ			-
Vα12										A	[SEQ	ID	NO:	15]
Vα14											[SEQ			•
Vα15	AGG	TCT	TGT	GTC	CCT	GAC	AGT	CCT	GGT	T	[SEQ	ID	NO:	17]
4.														
Va16	CAA	GCA	AAC	ACT	GTA	GTG	CAG	AGC	CCT	TCC	[SEQ	ID	NO:	18]
Vα17	CAA										[SEQ			_
Vα18	GTG	TAT	GAA	ACC	CAG	GAC	AGT	TCT	TAC		[SEQ	ID	NO:	20]
Vα19										AT	[SEQ	ID	NO:	21]
Vα20	CAA	AGC	TCT	CCA	TCG	CTG	ACT	GTT	CAA	G	[SEQ	ID	NO:	22]

Beta Groups												
1. Vβ1 Vβ2 Vβ3 Vβ4 Vβ5.1	GGC GTG GAT	GTC AAA ATG	TCC TGG GGG CGA TCA	TAC CAA ACA	CAC GGA GTA	GTG CAA TCT	GTC AAA AGG	AA GC C	[SEQ [SEQ [SEQ [SEQ	ID ID ID	NO: NO: NO:	24] 25] 26]
2. Vβ6 Vβ7 Vβ8.1 Vβ8.2 Vβ8.3	TAC ATA ATA	CTG ACC ACC	TTG ATC ATG ACA ACA	AAA ACA ACA	AGA ATA ACA	ATG TGT TGT	GGA ACT ACT	GA GG GG	[SEQ [SEQ [SEQ [SEQ	ID ID ID	NO: NO: NO:	29] 30] 31]
3. Vβ9 Vβ10 Vβ11 Vβ12 Vβ13	GAT ACA ACC	TAT AGG TAC	CAA GTT TGA AGA CCC	TAG CAG ACC	CTA GGA CAA	CAA AGG GGA	TAA GAC CTC	TA AA AG	[SEQ [SEQ [SEQ [SEQ	ID ID ID	NO: NO: NO:	34] 35] 36]
4. Vβ14 Vβ15 Vβ16 Vβ17 Vβ18	AGA CAT GTA	ACC CAA GTC	ATC ATC ATA CTG TCA	TGT ATA AAA	AAG GAT AAG	AGT ATG GGC	GGA GGG ACA	AC CA CT	[SEQ [SEQ [SEQ [SEQ	ID ID ID	NO: NO: NO:	39] 40] 41]

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λ.Π. <i>(</i> *)	777	9	mmc.		18										አአሮ	መሮሮ	54 CTC	[SEQ	Τħ	NO.	/ /31
AIG	AAA 	100	116	AUI	U11	100	CIA	טוט	<u></u>		100		CAG	114	AAC	100		ĺομδ	ΙD	1VV.	43]
Met	Lys	Ser	Leu	Ser	Val	Ser	Leu	Val	Val	Leu	Trp	Leu	Gln	Leu	Asn	Trp	Val	[SEQ	ID	NO:	44]
		63			72			81			90			99			108				
CAG	AGC	CAG	CAG	AAG	GTG					GAA		CTC	AGT	GTC	CCA	GAG	GGA				
Gln	Ser	Gln	Gln	Lys	Val							Leu	Ser	Val	Pro	Glu	Gly				
		117			126			135			144			153			162				
GGC	ATG	GCC	TCT	CTC	ACC	TGC	ACT	TCA	AGT	GAT	CGC	AAT	TTT	CAG	TAT	TTC	TGG				
Clu	 M∧+	Ala	Cor		Acn	Cue	Thr	Cor	 Car	 Aen	 1\ra	 1 cn	 Dha	 Cln	Tur	Dha	 Trn				
gī	rict	nıa	net	ПСЛ	non	cys	1111	net	₽ĊŢ	nop	пту	וופע	TIIC	QIII	TÅT	THE	11 h				
		171			180			189			198			207			216				
TGG	TAC	AGA	CAG	CAT	TCT	GGA	GAA	GGC	CCC	AAA	GCA	CTG	ATG	TCC	ATC	TTC	TGG				
Trp	П	7					Cl.,		Dro	Tuo	772		Mo+	Cor	T10	Dho	Cor				

FIG. 7A

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	2	225		4	234		2	243		2	252		2	261		2	270
GAT	GGT	GAC	AAG	AAA	GAA	GGC	AGA	TTC	ACA	GCT	CAC	CTC	AAT	AAG	GCC	AGC	CTG
 Asp	 Gly	Asp	Lys	 Lys	 Glu	Gly	 Arg	 Phe	Thr	Ala	His	Leu	 Asn	Lys	 Ala	Ser	Leu
CAT	GTT													315 GCT			324 TTC
His	Val	Ser	Leu	His	Ile	Arg	Asp	Ser	Gln	Pro	Ser	Asp	Ser	Ala	Leu	Tyr	Phe
		GTT	ATG	GAT		AAC	CAG	GGG	AAG	CTT	ATC	TTT	GGG	369 CAG Gln	GGT	ACC	
			AAG Lys		31												

FIG. 7B

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ATG GGC T	9 CC AGA	CTC :									TGT					[SEQ	ID	NO:	45]
Met Gly S	er Arg	Leu	 Phe	 Phe	 Val	 Val	 Leu	Ile	 Leu	 Leu	 Cys	 Ala	Lys	His	Met	[SEQ	ID	NO:	46]
GAG GCT G	63 GCA GTC	ACC	-								GTA				108 AAG				
Glu Ala A	ala Val	Thr	Gln	Ser	Pro	Arg	Ser	Lys	Val	Ala	Val	Thr	Gly	Gly	Lys				
GTG ACA T	.17 PTG AGC										ATG			TAT	162 CGG				
Val Thr L	Leu Ser	Cys	His	Gln	Thr	Asn	Asn	His	Asp	Tyr	Met	Tyr	Trp	Tyr	Arg				
CAG GAC A	L71 ACG GGG	CAT	GGG	CTG	AGG	CTG	ATC	CAT	TAC		TAT			GAC	216 AGC				
Gln Asp T	Thr Gly	His	Gly	Leu	Arg	Leu	Ile	His	Tyr	Ser	Tyr	Val	Ala	Asp	Ser				

FIG. 7C

Title: T CELL RECEPTORS FROM HLA TRANSGENIC MICE

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														261		~	270
ACG	GAG	AAA	GGA	GAT	ATC	CCT	GAT	GGG	TAC	AAG	GCC	TCC	AGA	CCA	AGC	CAA	GAG
Thr	Glu	Lys	Gly	Asp	Ile	Pro	Asp	Gly	Tyr	Lys	Ala	Ser	Arg	Pro	Ser	Gln	Glu
		279			288			297			306			315			324
AAT	TTC	TCT	CTC	ATT	CTG	GAG	TTG	GCT	TCC	CTT	TCT	CAG	TCA	GCT	GTA	TAT	TTC
Asn	Phe	Ser	Leu	Ile	Leu	Glu	Leu	Ala	Ser	Leu	Ser	Gln	Ser	Ala	Val	 Tyr	Phe
		333			342			351			360			369			378
TGT	GCC		AGC														
		AGC		GAT	TTC	GCC	GGG	ACA	GGG	GGC	TTC	TAT	GAA	CAG	TAC	TTC	GGT
		AGC Ser	AGC	GAT Asp	TTC Phe	GCC	GGG	ACA	GGG	GGC	TTC	TAT	GAA	CAG	TAC	TTC	GGT
 Cys	Ala	AGC Ser 387	AGC Ser	GAT Asp	TTC Phe 396	GCC Ala	GGG Gly	ACA Thr	GGG	GGC	TTC	TAT	GAA	CAG	TAC	TTC	GGT

FIG. 7D

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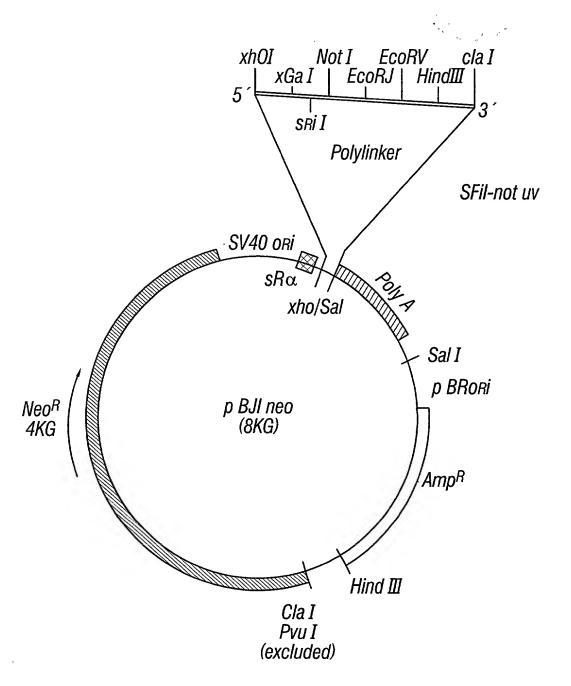


FIG. 8

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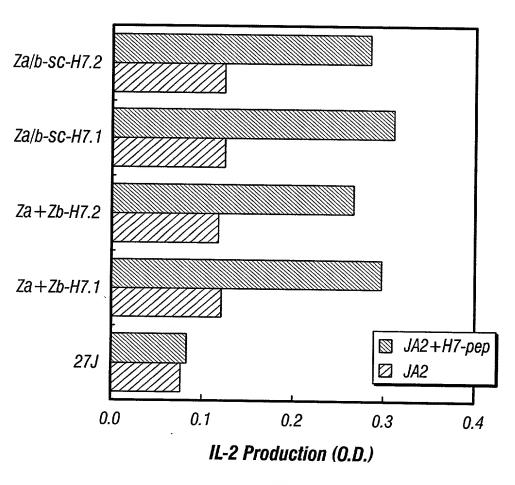


FIG. 9

Title: T CELL RECEPTORS FROM HLA TRANSGENIC MICE Inventors: Linda SHERMAN and Joseph LUSTGARTEN

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